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AUTHOR Wilcoxon, Barbara R.
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ABSTRACT

The purpose of this study was to determine and compare the psychological aspects (femininity, masculinity, and androgyny), attitudes, self-esteem, and social competence exhibited by female college athletes participating in elected individual and team sports. For the purpose of this research the following hypotheses were tested: The social costs of athletic participation by women today are not as great as previously, and contemporary changes in broadening of sex roles are reflected in the positive findings regarding the women athletes. Women proficient in individual sports (gymnastics and swimming) evidenced little anxiety about their own femininity. The self-image of women engaged in competitive team sports was less positive. Members of college varsity female team members participated in this research project. To obtain a descriptive psychological study of female college athletes three tests were administered: the Personal Attributes Questionnaire, Work and Family Orientation, and the Texas Social Behavior Inventory. Results of this research indicate that the female athlete is no longer being threatened by social sanctions and stereotyping, whether engaged in individual or team sports. (JD)

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PSYCHOLOGICAL ASPECTS OF FEMALE COLLEGE ATHLETES

by

Barbara R. Wilcoxon

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Chapter 1

The femininity of female athletes has been questioned because their sports performance was not entirely in line with the culturally approved female role.(40) The conflicts among culturally approved roles, individual desires, and self concept have forced women to make decisions concerning sports participation. Some girls avoid the conflict by terminating active sports competition during adolescence. Other girls neither care what society thinks nor allows societal views to dominate their lives. Many girls actively participate and some have been stereotyped as masculine in actions and appearance. Another alternative is one of playing dual roles. Accordingly, some females participating in athletics go out of their way to prove their femininity in dress, hair style, and make up.(14)

Psychological demands of competitive athletics involve characteristics that are considered to be more masculine in nature. A strong achievement motive, dominance and aggression are often in conflict with what is considered feminine. As women become more secure and self assured, they can risk involvement in athletics without being threatened in their role as females.(13)

Society has emphasized the "maleness" of sports. Media exposure to the advanced role of women and sport will assist in changing attitudes and stereotypes.(24) Research

must also be helpful by studying not what is feminine or masculine but what is acceptable in human behavior in the realm of competitive athletics.

There has been very little research on girls and women and their involvement in competitive athletics. Scientific evidence is needed on which to base decisions concerning girls and sports participation.(11, 15, 31, 33, 42) Psychological and sociological characteristics of the sportswoman also need to be studied.(9, 11) The feminist movement and equal opportunity laws have opened the door to change in the female societal role. Replication of studies should be undertaken due to this change in societal attitudes.(5, 8)

Aspects of psychological well-being, femininity and body image have rarely been studied. "Little research exists in the area of mental health as related to women's involvement in sports."(21:376) "Further research on the woman athlete is necessary, especially in a period of social change in the perception of sex roles."(31:197)

PURPOSE

The purpose of this study was to determine and compare the psychological aspects (femininity, masculinity, and androgyny), attitudes, self-esteem, and social competence exhibited by female college athletes participating in selected individual and team sports.

DELIMITATIONS

The group tested consisted of volunteers from team sports (volleyball, basketball, softball) and individual sports (archery, badminton, gymnastics, swimming).

Many female athletes at Arizona State University have experienced sports competition at the high school level. They have made their decision concerning the intensity and seriousness of their participation. As adults, they have developed a personality, self concept, and a social role with which they are comfortable.

The Personal Attributes Questionnaire (PAQ) and the Texas Social Behavior Inventory (TSBI) were used to test sex role stereotypes (feminine self, masculine self) and self esteem and social competence. The short form of the TSBI was used and correlates strongly (.97) with the long form. The PAQ has a reliability of .98 on the stereotype scale and a .91 on the self scale. The short form has a correlation of .94 and .92, respectively.(16, 38)

DEFINITIONS

The traditional feminine image has been largely determined by the male population.(14) The level of femininity is determined by a woman's personal needs and abilities in relation to the role accepted by society and her concept of her role in that society.(29) Femininity concerns temperament. Our culture has traditionally viewed

the feminine woman as graceful, non-aggressive, passive, and gentle.(43)

Stereotyping is a defense mechanism. It is a rigid, oversimplified or biased perception. Stereotyping involves prejudices which are closely related to and dependent upon attitudes.(24)

Body image is described as the feelings one has towards one's own body, especially energy and health.(36) It is also a personal interpretation of one's actions, appearance and environmental feedback.(34) Body image involves a comparison and identification with the bodies of other persons.(7)

Masculinity and femininity have previously been considered bipolar standards of behavior. One's self concept might allow oneself to freely engage in both masculine and feminine behaviors. Displaying high levels of both masculine behavior and high levels of feminine behavior is now recognized as being androgynous. The androgynous individual becomes sensititive to the changing constraints of the situation and engages in whatever behavior seems most effective at the moment, regardless of its stereotype.(3, 4)

HYPOTHESIS

The review of literature suggests that societal attitudes towards female athletes are more positive in the area of individual sports than team sports. Individual

sport athletes also exhibit a more positive body image and self concept than the team sport athletes. Research is currently in conflict in both of these areas.

> The social costs of athletic particpation by women today are not as great as previously and contemporary changes in broadening of sex roles are reflected in the positive findings regarding the women athletes.(35:808)

The investigator assumed the null hypothesis and tested it at the .05 level of significance.

Chapter 2

There had previously been little research on the psychological aspects of femininity in female college athletes. There have been studies on variables that have a relationship to femininity such as personality, self concept, body image, and attitudes towards female athletes. In the 1970s, conventional sex role stereotypes were breaking down, allowing a greater range of behavior for both men and women. Researchers have begun studying behavior without tying it rigidly to one sex or the other, but rather allowing for the concept of androgyny.(17)

Personality traits of female athletes have been well researched. Peterson(30) compared 156 AAU female athletes and 1964 Olympic female team members, 59 of whom were team sport athletes and 38 of whom were individual sport athletes. Peterson found individual sport athletes had higher dominance, adventurousness, sensitivity, introversion, radicalism, and self sufficiency. They scored lower in sophistication and no differences were found in social-ability, intelligence, and stability.

Malumphy(26, 27) studied female college individual and team sport athletes using the Cattell 16 PF and a personal information questionnaire. Malumphy found individual sport athletes to be less anxious, more venturesome, more extroverted and they felt participation

enhanced their femininity. Athletes in team sports were less sure that participation enhanced their feminine image and participated despite the stigma of "men's sport" involvement.

Ibrahim(20) compared temperamental traits among athletes and physical education majors using GAMIN (Guilford-Martin Inventory of Factors). He found dancers were most feminine (24th percentile) followed by physical education majors (40th percentile) and athletes (62nd percentile). In general, there were no marked differences in personalities of women compared to men.(6)

Harres' study(10) of the attitudes of students towards athletic competition for girls and women found that participation in individual sport competition was viewed as more favorable than team sport competition. A sport preferential ranking was used with the following results: 1--swimming, 2--tennis, 3--volleyball, 4--track and field, 5--softball, 6--basketball. Harres found that athletes were being more accepted by peer group and that many students were undecided in their answers. Kennicke discovered that swimmers and gymnasts viewed the team sports participant as being much less feminine.(12)

Landers(22) used the Gough Femininity Scale of the California Psychological Inventory on physical education and education majors. Landers found that the physical education majors were significantly less feminine than education majors. In accordance with other femininity studies, the

results provide little information regarding reasons for such differences. Using a personal questionnaire, Landers also found a high correlation between sibling sex status and ordinal position on college women's femininity and the degree of sport and recreation participation.(23) Rosenberg's(32) research suggested that the father plays a more critical role in the development of the children's sex role preference.

Psychological well-being and body image of college non-athletes, gymnasts, swimmers, track and field athletes, and basketball players were studied by Snyder.(36) All had positive feelings towards their bodies especially in energy and health. The results between the gymnasts and basketball players were not significant "despite greater public acceptance of the more aesthetically pleasing gymnast." (36:196) Both gymnasts and basketball players viewed their bodies in relation to the way they used them in their chosen sport. In Balazs'(1) study of female Olympic athletes, a high positive correlation between self esteem and achievement and self concept was evidenced.

Metheny(28) established the following as generally acceptable activities for women:

Individual sports:
1. body propelled in space aesthetically
2. use of manufactured device to facilitate movement
3. force applied through light implement
4. overcome resistance of light object

Team sports:

1. force applied through light implement
2. overcome resistance of weightless object
3. spatial barrier to prevent body contact

Harris(12) has studied several areas of the psychological makeup of female athletes. As attitudes have changed, Harris found that some instruments used are biased against the female personality and, therefore, can give biased results on femininity. (See Appendix--Correspondence)

New goals are developing related to personal, interpersonal and humanistic values--happiness, creativity, fulfillment, expansion and personal growth. There is a need for fusion of masculine and feminine qualities. When a female maintains qualities of independence and active striving (achievement orientation) necessary for intellectual mastery, she defies the conventions of sex appropriate behavior and must pay a price--a price in anxiety.(2, 12)

Horner's theory of M_2 (motive to avoid success) is a psychological barrier for success in an achievement-oriented society. If success occurs, it is followed by negative consequences of social rejection and a sense of losing one's femininity.(44) The dilemma for women involves living in this society and being aggressive or become discouraged from overt expressions and living a dependent feminine role. The societal changes may allow the sportswoman to elect their role and enjoy their freedom of choice.(43)

More recently, Snyder and Spreitzer(35) studied sports participation among adolescent girls in Ohio and their perceived femininity. The "very feminine" perception for each group was: gymnasts--70 percent, basketball--44 percent, track--56 percent, and non-participants--58 percent. The Tennessee Self-Concept Scale was administered by Vincent(41) to female non-athletes, varsity college athletes and physical education majors. The athletes were found not to be significantly different from physical education majors or non-athletes.

Expression of the humanism of the body through sports is needed and desired. Behaviors demanded in sports are not sex-linked but are considered human behavior. The sportswoman can function as a female in spite of athletic involvement.(12, 19) The movement experience does not change who or what she is nor does it change her femininity. (29) Billy Jean King's statement "I'm a woman who just happens to be an athlete" reflects this attitudes.(29:21)

The most recent studies involve analyzation of human behavior. The Bem Sex Role Inventory (BSI) measures psychological androgyny or the positive characteristics of masculinity and femininity by self description. A masculine score, a feminine score and an androgynous score are computed. The androgynous score is determined by the difference between the endorsement of standardized masculinity and femininity score. This score indicates the nature of a person's total sex role. From these scores a

Social Desireability score can be determined.(3, 4)

Spence, Helmreich and Stapp developed a Personal Attributes Questionnaire (PAQ) to measure sex role stereotypes and masculinity and femininity. There is a stereotype scale score and a self scale score determined from ratings on bipolar items. The two scale scores were then compared. If a woman scored high on the femininity stereotype scale score, she also tended to be high on the femininity self score. This would suggest that if one has a high feminine score the masculine score would be low. This did not occur in the individuals sampled by Helmreich and Spence.(38)

Helmreich and Stapp designed the Texas Social Behavior Inventory (TSBI) to measure self esteem and social competence including aspects of personal worth and social interaction. This involved a self rating to determine high or low self esteem. The results showed a high positive correlation with the PAQ and masculinity and femininity on self esteem for both men and women.(16)

A classification system was then established to demonstrate the sex role attributes. Each individual is rated according the median of masculinity and femininity. Those who scored above the median on both masculinity and femininity are labeled as androgynous. (See Figure 1)

Self esteem was then determined. Helmreich and Spence found that self esteem was lowest in the Undifferentiated group, followed by the Feminine group, followed by the

		MASCULINITY	
		Below Median	Above Median
FEMININITY	Below Median	UNDIFFERENTIATED	MASCULINE
	Above Median	FEMININE	ANDROGYNOUS

Figure 1

PAQ: Classifications

Masculine group with the Androgynous group exhibiting the highest self esteem. Females falling in the Masculine classification did not perceive themselves as being less socially competent than the traditional female.

To validate these findings, Helmreich and Spence studied female varisty athletes at the University of Texas. The percentage of athletes in each classification are as follows: Undifferentiated--20 percent, Feminine--10 percent, Masculine--31 percent, Androgynous--39 percent. These results indicated that female athletes who succeed in masculine stereotype areas do not lose their femininity. High achievement motivated women are more likely to possess both masculine and feminine attributes and higher self esteem than females in other groups.(13, 16, 37, 39)

Harris(13) used the PAQ, WOFO, and TSBI on female distance runners including a scholastic group twenty-three years old or younger and a club group of twenty-six years or

older. The scholastic group fell in to the following classifications: Undifferentiated--20 percent, Feminine--20 percent, Masculine--20 percent, Androgynous--38 percent. Females classified as Androgynous also exhibited the highest self esteem.

The knowledge of psychological aspects of female athletes will expand. Researchers know the personality traits, family influences and societal views of the female athlete. The objective in sport is to excel to win and, by so doing, hopefully, women will not lose the game of socialization. Femininity is a view of the beholder and researchers and educators must develop awareness to the values and rewards of participation. The benefits and pleasures derived from competitive sports should be enjoyed by all.(12, 14)

The female athlete is first and foremost a girl or woman. From this base grows a concept of self as a performer. By studying psychological aspects of athletes, we can accept and encourage the qualities of the athletic girl without labeling her as masculine and encourage in her whatever aspects of human behavior are compatible with excellence in sport.(25, 31)

Chapter 3

Varsity team members were contacted requesting their participation in a research study dealing with the psychological traits of female college athletes. The test participants by sport were 10 archers, 8 badminton players, 13 basketball players, 9 gymnasts, 12 softball players, 14 swimmers, and 9 volleyball players. This was a response of 71.4 percent with an N = 75. (Team sport, N = 34; individual sport, N = 41; outstanding, N = 26, not outstanding, N = 49.)

The Personal Attributes Questionnaire, Work and Family Orientation and the Texas Social Behavior Inventory were administered using standardized directions and computer scored answer sheets. The purpose of the study was explained as a descriptive psychological study of female college athletes.

The Protection of Human Subjects Approval Form was approved by the HPERD Human Experimentation Committee. The subjects gave Informed Consent by signing a list guaranteeing their knowledge of procedures, benefits and risks. They were aware that their participation was voluntary and they could withdraw at any time from the testing.

A code for protection of subjects was designed for anonymity. Once the tests were scored and analyzed, the

subject identification code was destroyed.

The results of the PAQ were classified by percentages for each team into Undifferentiated, Feminine, Masculine, and Androgynous. The team sport group, individual sport and outstanding non-outstanding athletes were also classified. The TSBI mean scores for each group were determined and all scores were tested by ANOVA for significance at the .05 level.

Chapter 4

The mean number of years of competitive experience for all athletes was 5.6 years which included club competition as well as high school and college competition. Many athletes from the badminton, gymnastics and swim teams started as club participants and competitors which resulted in more years of competition as indicated in Table 1.

Table 1

Years of Competitive Experience

Team	Years
Archery	5.0
Badminton	6.5
Basketball	5.2
Gymnastics	6.2
Softball	5.1
Swimming	6.2
Volleyball	5.1

The psychological androgyny of the athletes derived from the PAQ are classified by percentages (adjusted frequencies) by sport in Table 2.

The greatest percentages of archers, badminton players, and basketball players were found to be androgynous--60.0, 50.0, 46.2, respectively. The greatest percentages of gymnasts, softball players, swimmers and volleyball players

Table 2

PAQ Classifications by Sport

Team	Undifferentiated %	Feminine %	Masculine %	Androgynous %
Archery N = 10	10.0	10.0	20.0	60.0
Badminton N = 8	25.0	0.0	25.0	50.0
Basketball N = 13	7.7	7.7	38.5	46.2
Gymnastics N = 9	11.1	33.3	44.4	11.1
Softball N = 12	16.7	8.3	41.7	33.3
Swimming N = 14	7.1	0.0	64.3	28.6
Volleyball N = 9	22.2	22.2	33.3	22.2

were classified as Masculine--44.4, 41.7, 64.3, 33.3, respectively.

As indicated in Table 3, classification of psychological androgyny by team sport group, individual sport group and all athletes found the greatest percentage as Masculine. One should note the high percentage of androgynous athletes.

Comparisons were also made according to the caliber of the athlete. Outstanding athletes included all-conference/all-Americans and non-outstanding athletes were all other varsity team letter winners. In Table 4 the outstanding athletes were predominately masculine while

the majority of non-outstanding athletes were androgynous.

Table 3

PAQ Classification by Group

Group	Undifferentiated %	Feminine %	Masculine %	Androgynous %
All Athletes N = 75	13.3	10.7	40.0	36.0
Team N = 34	14.7	11.8	38.2	35.3
Individual N = 41	12.2	9.8	41.5	36.6

Table 4

PAQ Classification by Caliber

Caliber	Undifferentiated %	Feminine %	Masculine %	Androgynous %
Outstanding N = 26	15.4	7.7	50.0	26.9
Non-Outstanding N = 49	12.2	12.2	34.7	40.8

The TSBI mean score for all female athletes was 42.71 with a SP = 7.94 (Table 5). The mean for the individual sport group was 43.51 and 41.74 for the team sport group. No significant difference was found by MANOVA at the .05 level. (Multivariate analysis of variance)

All teams were above the national female college student mean of 40.64 except the volleyball team, as noted in Table 6.

Table 5

TSBI Mean by Group

Group	Mean	S.P.
All Athletes	42.71	7.94
Team	41.74	7.82
Individual	43.51	8.04

Table 6

TSBI Mean by Sport

Team	Mean	S.P.
Archery	41.30	6.67
Badminton	44.86	9.64
Basketball	44.08	6.66
Gymnastics	41.67	10.87
Softball	41.08	7.98
Swimming	45.50	5.96
Volleyball	39.22	9.03

The TSBI self-esteem was calculated for each PAQ classification. The Androgynous group had the highest self-esteem (46.04). The Masculine group was second with a mean of 43.08. The Undifferentiated and Feminine groups were last with mean scores of 36.50 and 35.12, respectively. By a simple 1 x 4 ANOVA a significant difference was found among the groups beyond the .001 level of significance. (See Table 7)

Table 7

Summary of Table of ANOVA for Self-Esteem
as Determined by the Texas
Social Behavior Inventory

Source	DF	MS	F	P
Groups*	3	.0393	8.030	.0003
Error	71	.0049		
Total	74	.0063		

*Subjects grouped according to Androgynous classifications.

Chapter 5

The volleyball team was the most homogeneous group on PAQ classification with masculinity being the highest (33.3%) and the other three classifications being equal (22.2%). They were also below the mean on self-esteem of Arizona State University athletes as well as below the national mean. The volleyball players who were tested did not include three players who also competed in basketball and/or softball. These players were placed into their sport category according to their skill accomplishment and recognition. Without these players, the volleyball team scores may have been adversely affected.

The gymnastics team had the smallest percentage of androgynous members but did have the highest percentage of masculine members. Previous research has indicated high levels of femininity of gymnasts, whereas this study has found a tendency towards a more masculine gymnast.

Even though swimming may be a preferred sport for women as indicated in Harres' study(10) the swim team had the greatest percentage of members in the masculine classification. This may be a result of the high level of competition they have experienced as long time competitors and national champions.

This study indicates that an increasing number of female athletes are exhibiting androgyny which includes

masculine and feminine characteristics. Individual sport athletes, previously found to be high in femininity, are now demonstrating more masculine characteristics resulting in greater numbers of them to be classified masculine and androgynous. Team sport athletes, previously found to be high in masculinity, are now displaying more femininity resulting in greater numbers to be classified as androgynous. The greater latitude of social acceptance of sex-role behavior of the team sport athlete may have helped develop greater self esteem and social competence and indirectly affected the amount of feminine behaviors exhibited.

The above-national-norm means in self-esteem may indicate a greater self-confidence--self-perception on the part of the athlete than has been found in the past. Though the relationships between groups, sports and caliber are not significant, this, in itself, is significant. By this study, there are no longer significant differences between individual and team sport athletes nor are there significant differences between athletes and non-athletes.

This research seems to suggest that the female athlete is no longer being threatened by social sanctions and stereotyping. The door is open for females to make their own decision concerning sports participation. As the female athlete accepts herself and is accepted and encouraged by our society, there will be increased pride and participation in athletics.

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